RESCO PROD INC/NEW CASTLE REFRACTORIES



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

STATE ONLY OPERATING PERMIT

Issue Date: July 11, 2008 Effective Date: July 11, 2008

Expiration Date: August 31, 2012

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

State Only Permit No: NM-37-00152

Federal Tax Id - Plant Code: 23-1279448-4

Owner Information

Name: RESCO PROD INC Mailing Address: 915 INDUSTRIAL ST

NEW CASTLE, PA 16102-1329

Plant Information

Plant: RESCO PROD INC/NEW CASTLE REFRACTORIES

Location: 37 Lawrence County 37001 New Castle City

SIC Code: 3297 Manufacturing - Nonclay Refractories

Responsible Official

Name: TIMOTHY J POWELL Title: CFO & VP OF FINANCE

Phone: (412) 494 - 4491

Permit Contact Person

Name: ROGER FLAMINO Title: PLANT MANAGER Phone: (724) 654 - 7711 Ext.107

[Signature] _____

JOHN F GUTH, NORTHWEST REGION AIR PROGRAM MANAGER



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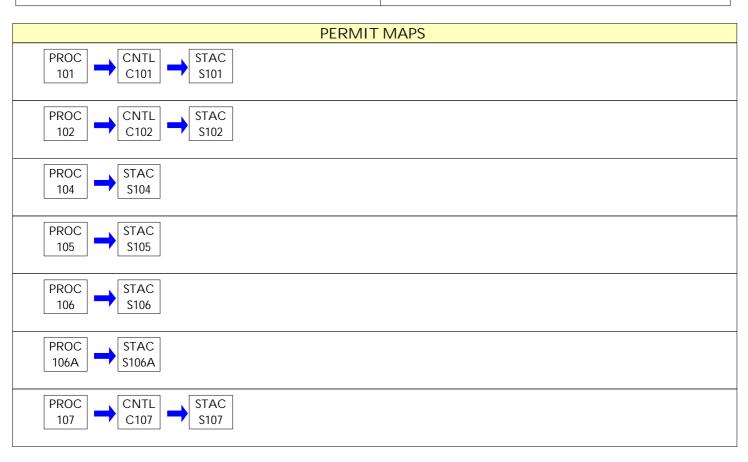
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SECTION A. Site Inventory List

| Source I | ID Source Name | Capacity | Throughput | Fuel/Material |
|----------|--------------------------|----------|------------|---------------|
| 101 | RAW MATERIALS MIXING | 700.000 | Lbs/HR | RAW MATERIALS |
| 102 | #1 & #2 RAM MIXERS | 2.500 | Tons/HR | RAW MATERIALS |
| 104 | DRYERS (3) | 7.300 | MCF/HR | Natural Gas |
| 105 | PERIODIC KILNS (4) | 41.600 | MCF/HR | Natural Gas |
| 106 | SHUTTLE KILNS 2 & 3 | 22.800 | MCF/HR | Natural Gas |
| 106A | SHUTTLE KILN 1 | 9.600 | MCF/HR | Natural Gas |
| 107 | FINISH GRINDERS (2) | 100.000 | Lbs/HR | FIRED PRODUCT |
| 108 | MISC NATURAL GAS USE | 4.000 | MCF/HR | Natural Gas |
| C101 | SLIP BAGHOUSE | | | |
| C102 | RAM BAGHOUSE | | | |
| C107 | GRINDER BAGHOUSE | | | |
| S101 | RAW MAT. MIX. STACK | | | |
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| S107 | GRINDERS STACK | | | |
| S108 | MISC. NAT. GAS STACKS | | | |







PERMIT MAPS

PROC STAC S108



#001 [25 Pa. Code § 121.1]

Definitions.

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and in 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.446]

Operating Permit Duration.

- (a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.
- (b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)&(c)]

Permit Renewal.

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
 - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
 - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter I.

- (a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):
 - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.



(2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension, modification, revision, renewal, and re-issuance of each operating permit or part thereof.

- (b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).
 - (1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.
 - (2) Three hundred dollars for applications filed during the 2000-2004 calendar years.
 - (3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.
- (c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund".

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]

Transfer of Operating Permits.

- (a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.
- (b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.
- (c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]

Inspection and Entry.

- (a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:
- (1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
 - (2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.
- (b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.
- (c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.



#007 [25 Pa. Code §§ 127.441 & 127.444]

Compliance Requirements.

- (a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:
 - (1) Enforcement action
 - (2) Permit termination, revocation and reissuance or modification
 - (3) Denial of a permit renewal application
- (b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.
- (c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]

Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for the permittee in an enforcement action that it was necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#009 [25 Pa. Code §§ 127.442(a) & 127.461]

Duty to Provide Information.

- (a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.
- (b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]

Revising an Operating Permit for Cause.

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.
- (2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.



TUDY IN

SECTION B. General State Only Requirements

- (3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.
- (4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450 & 127.462]

Operating Permit Modifications

- (a) The permittee is authorized to make administrative amendments, minor operating permit modifications and significant operating permit modifications, under this permit, as outlined below:
- (b) Administrative Amendments. The permittee shall make administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.
- (c) Minor Operating Permit Modifications. The permittee shall make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

#012 [25 Pa. Code § 127.441]

Severability Clause.

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#013 [25 Pa. Code § 127.449]

De Minimis Emission Increases.

- (a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:
 - (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.
- (b) The Department may disapprove or condition de minimis emission increases at any time.
- (c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:
- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air



Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.
 - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:
- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
 - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
 - (4) Space heaters which heat by direct heat transfer.
 - (5) Laboratory equipment used exclusively for chemical or physical analysis.
 - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.
- (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
- (3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#014 [25 Pa. Code § 127.3]

Operational Flexibility.

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined



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in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit modifications)
- (7) Subchapter H (relating to general plan approvals and general operating permits)

#015 [25 Pa. Code § 127.11]

Reactivation

- (a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisifies the conditions specified in 25 Pa. Code § 127.11a(b).

#016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

- (a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].
- (b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]

Circumvention.

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#018 [25 Pa. Code §§ 127.402(d) & 127.442]

Reporting Requirements.

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.



- (b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.
- (c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given in the permit transmittal letter, or otherwise notified)

- (d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.
- (e) Any records, reports or information submitted to the Department shall be available to the public except for such records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

#019 [25 Pa. Code §§ 127.441(c) & 135.5]

Sampling, Testing and Monitoring Procedures.

- (a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.
- (b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

#020 [25 Pa. Code §§ 127.441(c) and 135.5]

Recordkeeping.

- (a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:
 - (1) The date, place (as defined in the permit) and time of sampling or measurements.
 - (2) The dates the analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of the analyses.
 - (6) The operating conditions as existing at the time of sampling or measurement.
- (b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.
- (c) The permittee shall maintain and make available to the Department upon request, records including computerized



records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

#021 [25 Pa. Code § 127.441(a)]

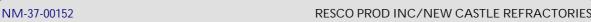
Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privileges.

#022 [25 Pa. Code § 127.447]

Alternative Operating Scenarios.

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.



SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
 - (4) Clearing of land.
 - (5) Stockpiling of materials.
 - (6) Open burning operations.
 - (7) Not applicable
 - (8) Not applicable
- (9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
 - (i) the emissions are of minor significance with respect to causing air pollution; and
- (ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

002 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

003 [25 Pa. Code §123.31]

Limitations

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

004 [25 Pa. Code §123.41]

Limitations

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.



SECTION C. Site Level Requirements

005 [25 Pa. Code §123.42]

Exceptions

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).
 - (4) Not applicable

II. TESTING REQUIREMENTS.

006 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

007 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified in subsections (a)(1) -- (7) or (9) [condition #001] shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.



SECTION C. Site Level Requirements

- (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

008 [25 Pa. Code §129.14]

Open burning operations

- (a) Air basins. No person may permit the open burning of material in an air basin.
- (b) Not applicable
- (c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:
- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
 - (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
 - (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
 - (4) Not applicable
 - (5) Not applicable
 - (6) A fire set solely for recreational or ceremonial purposes.
 - (7) A fire set solely for cooking food.
 - (d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
 - (1) As used in this subsection the following terms shall have the following meanings:

Air curtain destructor -- A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes -- Trees, shrubs, and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

- (2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:
 - (i) Air curtain destructors shall be used when burning clearing and grubbing wastes.
- (ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction modification, reactivation and operation of sources).
- (iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.





SECTION C. Site Level Requirements

(iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.

- (3) Not applicable
- (4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste Management Act, 35 P.S. Section 6018.610(3), or any other provision of the Solid Waste Management Act.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.





Source ID: 101 Source Name: RAW MATERIALS MIXING

Source Capacity/Throughput: 700.000 Lbs/HR RAW MATERIALS



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- a) The permittee shall maintain a log of all preventive maintenance inspections of the control device.
- b) At a minimum, each log entry shall include the inspection date, potential problems or existing defects discovered, corrective action taken (if needed) and the measured pressure drop.
- c) The log shall be kept on site for at least 5 years and shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- a) The permittee shall maintain and operate the control device in accordance with the manufacturer's specifications.
- b) The control device shall be fitted with a magnehelic gauge (or equivalent) to measure the pressure drop across the control device.
- c) Preventive maintenance inspections of the control device shall be performed and the pressure drop noted no less frequently than every 15 days.





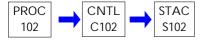


VII. ADDITIONAL REQUIREMENTS.



Source ID: 102 Source Name: #1 & #2 RAM MIXERS

Source Capacity/Throughput: 2.500 Tons/HR RAW MATERIALS



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- a) The permittee shall maintain a log of all preventive maintenance inspections of the control device.
- b) At a minimum, each log entry shall include the inspection date, potential problems or existing defects discovered, corrective action taken (if needed) and the measured pressure drop.
- c) The log shall be kept on site for at least 5 years and shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- a) The permittee shall maintain and operate the control device in accordance with the manufacturer's specifications.
- b) The control device shall be fitted with a magnehelic gauge (or equivalent) to measure the pressure drop across the control device.
- c) Preventive maintenance inspections of the control device shall be performed and the pressure drop noted no less frequently than every 15 days.



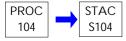


VII. ADDITIONAL REQUIREMENTS.



Source ID: 104 Source Name: DRYERS (3)

Source Capacity/Throughput: 7.300 MCF/HR Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

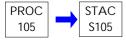
No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.



Source ID: 105 Source Name: PERIODIC KILNS (4)

Source Capacity/Throughput: 41.600 MCF/HR Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.



Source ID: 106 Source Name: SHUTTLE KILNS 2 & 3

Source Capacity/Throughput: 22.800 MCF/HR Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Particulate matter emissions from this source (shuttle kilns #2 & #3) shall not exceed 0.02 grain per dry standard cubic foot. [from Plan Approval 37-152A condition #6]

Fuel Restriction(s).

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Only natural gas may be used as a fuel for this source (shuttle kilns #2 & #3). [from Plan Approval 37-152A condition #7]

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain records of natural gas use by this source (shuttle kilns #2 & #3). These usage records shall be kept at the facility for at least five years. [from Plan Approval 37-152A condition #7]

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.







VII. ADDITIONAL REQUIREMENTS.

005 [25 Pa. Code §127.12b]

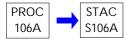
Plan approval terms and conditions.

Hydrocarbon binder shall not be used. [from Plan Approval #37-152A condition #5]



Source ID: 106A Source Name: SHUTTLE KILN 1

Source Capacity/Throughput: 9.600 MCF/HR Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

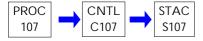
No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.



Source ID: 107 Source Name: FINISH GRINDERS (2)

Source Capacity/Throughput: 100.000 Lbs/HR FIRED PRODUCT



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- a) The permittee shall maintain a log of all preventive maintenance inspections of the control device.
- b) At a minimum, each log entry shall include the inspection date, potential problems or existing defects discovered, corrective action taken (if needed) and the measured pressure drop.
- c) The log shall be kept on site for at least 5 years and shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

- a) The permittee shall maintain and operate the control device in accordance with the manufacturer's specifications.
- b) The control device shall be fitted with a magnehelic gauge (or equivalent) to measure the pressure drop across the control device.
- c) Preventive maintenance inspections of the control device shall be performed and the pressure drop noted no less frequently than every 15 days.



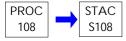


VII. ADDITIONAL REQUIREMENTS.



Source ID: 108 Source Name: MISC NATURAL GAS USE

Source Capacity/Throughput: 4.000 MCF/HR Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from this source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

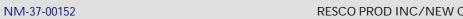
V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

VII. ADDITIONAL REQUIREMENTS.



SECTION E. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.



NM-37-00152



SECTION F. Emission Restriction Summary.

| Source Id | Source Descripti | on | | |
|-----------------------|------------------|-----------|-----------|--|
| 101 | RAW MATERIAI | LS MIXING | | |
| Emission Limit | | | Pollutant | |
| 0.040 | gr/DRY FT3 | | TSP | |
| 102 | #1 & #2 RAM MI | XERS | | |
| Emission Limit | | | Pollutant | |
| 0.040 | gr/DRY FT3 | | TSP | |
| 104 | DRYERS (3) | | | |
| Emission Limit | | | Pollutant | |
| 500.000 | PPMV | dry basis | SOX | |
| 0.040 | gr/DRY FT3 | | TSP | |
| 105 | PERIODIC KILN | S (4) | | |
| Emission Limit | | | Pollutant | |
| 500.000 | PPMV | dry basis | SOX | |
| 0.040 | gr/DRY FT3 | | TSP | |
| 10/ | | 20.00 | | |

| 104 | | 2 |
|-----|-------------------|----|
| 106 | SHUTTLE KILNS 2 & | .5 |

| Emission Limit | | | Pollutant |
|-----------------------|------------|-----------|-----------|
| 500.000 | PPMV | dry basis | SOX |
| 0.020 | gr/DRY FT3 | | TSP |

106A SHUTTLE KILN 1

| Emission Limit | | | Pollutant |
|----------------|------------|-----------|-----------|
| 500.000 | PPMV | dry basis | SOX |
| 0.040 | gr/DRY FT3 | | TSP |

107 FINISH GRINDERS (2)

| Emission Limit | | Pollutant |
|----------------|-----------|-----------|
| 0.040 gi | r/DRY FT3 | TSP |

108 MISC NATURAL GAS USE

| E | Emission Limit | | | Pollutant |
|---|----------------|------------|-----------|-----------|
| | 500.000 | PPMV | dry basis | SOX |
| | 0.040 | gr/DRY FT3 | | TSP |
| | | | | |

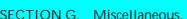
Site Emission Restriction Summary

| Emission Limit | Pollutant |
|----------------|-----------|
|----------------|-----------|



SECTION F. Emission Restriction Summary.





NM-37-00152

- a) The following grouped sources are further described as follows:
- 1) Source 101 includes: bag break/weigh station; 2nd floor batch vats (approx. 12); plaster batch mixer; and vibe-cast batch mixers (3, smaller). One control device handles these activities. The slip mix tank is excluded as it has only fugitive PM emissions and is located indoors.
 - 2) Source 104 includes 3, low-temperature drying chambers identified as #1Ram, #2 Ram, and vibe cast.
- 3) Source 105 includes #s 2, 7, 10 and 13 high-temperature brick kilns. #13 is considerably smaller in size. They exhaust through a common stack.
- 4) Source 106 includes the 2 high-temperature electronically controlled shuttle kilns known as #2 and #3. These are covered by Plan Approval 37-152A.
 - 5) Source 106A is the "grandfathered" shuttle kiln #1.
- 6) Source 107 includes the 2 grinding units exhausting through one control device. The adjacent clip wet-sawing operation is excluded as it has only fugitive PM emissions and is indoors.
 - 7) Source 108 includes 7 space heaters, 3 furnaces for comfort heating, and 5 lab kilns used for R&D purposes.

b) This State Only Operating Permit was administratively amended in January 2004 to include a new Federal Tax ID. New Castle

- b) This State Only Operating Permit was administratively amended in January 2004 to include a new Federal Tax ID. New Castle Refractories Co. is no longer a division of Dixon Ticonderoga Co.
- c) This permit was renewed on September 28, 2007.
- d) This permit was administratively amended on July 11, 2008. The following changes were made to the operating permit.
- 1) Resco Products Inc. purchased New Castle Refractories from Dixon Ticonderoga on December 1, 2006. This action lead to the change of ownership and federal tax identification number in the permit.
- 2) Source 103 (Simpson Mixer) and the associated control device (C103-Simpson Baghouse) were removed from the facility in February 2008. This equipment was moved to another facility outside Pennsylvania. This source was deleted from the permit.
- 3) The responsible official was changed from Mr. Lauren Allison, Controller, to Mr. Timothy J. Powell, VP of Finance and CFO. Mr. Powel can be reached at Two Penn Center West, Suite 430, Pittsburgh, PA 15276. His phone number is 412-494-4491.



***** End of Report *****